

INFANTRY NEWS



A NEW BRADLEY FIGHTING VEHICLE (BFV) exhibit is being developed at the National Infantry Museum, Fort Benning, Georgia. The exhibit is scheduled to open in November 2000. Visitors to the museum will be able to see an M2 Bradley up close, in an outdoor exhibit that features both an M2A1 and an engineering prototype of the M2A3.

The Bradley was developed to accommodate modular improvements. The M2A1, which incorporated the first in a series of improvements, received the improved TOW antitank missile system and a better chemical protection system. The M2A3 prototype features numerous improvements in lethality and survivability.

The indoor BFV exhibit, entitled "Lethal Beyond All Expectations," will be the museum's single largest exhibit.

In addition to equipment and displays, the exhibit will provide a comprehensive overview of the system's development from 1968 to the present, with supporting documentation. It will give visitors insight on the Bradley mission, doctrine, training, and organization. More important, the display will include accounts—by former and current program participants, including combat developers, materiel developers, and industry representatives—of the way the Bradley was developed, tested, fielded, and upgraded over the past 20 years.

The Bradley, as one of the "Big Five" post-Vietnam weapon systems, has had some interesting and unique twists and turns in its development. Following the Vietnam War, the U.S. Army underwent some radical reorganization and significant changes in doctrine, training and tactics. During these critical changes in the U.S. defense posture, and despite a massive build-up of the Soviet Union's armored force, the Army struggled to justify the greatly increased cost associated with replacing its infantry

armored personnel carrier with a much more expensive infantry fighting vehicle. It was against this setting that the Bradley evolved. Visitors will gain rare insight regarding the cost, schedule, and performance trade-offs required during the Bradley acquisition process.

The exhibit will feature newspaper articles, photographs, videos, and displays grouped by events in the program life-cycle. Some of the equipment displayed will include the M242 25mm Bushmaster cannon, M257 smoke grenade launcher, M240C coaxial 7.62 machinegun, M321 5.56mm firing port weapon, training ammunition, infantry squad equipment, TOW missile, M47 Dragon, and SINCGARS (single-channel, ground and airborne radio subsystem).

The U.S. Army Tank-automotive and Armaments Command is seeking Bradley documentation (photos, videotape, significant program documents, newspaper articles) for donation to the exhibit. Of particular interest is information regarding development of the Bradley's developmental predecessor, the MICV (mechanized infantry fighting vehicle) by Pacific Car and Foundry; the three Task Force Reports (Casey, Crizer, and Larkin); the cannon "shoot off" between Hughes Helicopter Company and Ford Aeronautronic Corporation; live-fire testing and test reports; and first-hand accounts of the Bradley's performance during Operation *Desert Storm*.

If you have documentation to donate (which will not be returned) or stories you would like to share regarding the development of the Bradley, please forward to: U.S. Army Tank-automotive and Armaments Command; Bldg. 229, SFAE-GCSS-W-BV (ATTN: Diane Urbina); Warren, MI 48397-5000. Email: urbnad@tacom.army.mil

THE CONTINENTAL UNITED STATES (CONUS) Replacement Center (CRC), located at Fort Benning, Georgia, receives and processes individual military personnel, civilians, and units for deployment to and redeployment from theaters of operation. Since December 1995 the CRC has supported operations in Germany, Italy, the United Kingdom, Spain, the Balkan region, and Kuwait, among others.

The core CRC cadre are active duty soldiers, supplemented by U.S. Army Reserve (USAR) units on a rotational basis. The staff provides administrative support and training coordination, while Fort Benning units provide the instruction. The CRC consists of two companies: Company A is responsible for deployment processing and Company B, for redeployment outprocessing.

CRC maintains a website at <http://www-benning.army.mil/fbhome/11th/crc> that shows the week's schedule in addition to providing detailed information on items and paperwork personnel must bring to CRC. The home page also includes a *Frequently Asked Questions* section and useful telephone numbers.

The people processing through the CRC include Active duty soldiers, U.S. Army Reservists and National Guardsmen, Red Cross representatives, technical contractors, civilian linguists, and employees of the Army and Air Force Exchange Service.

Pragmatically, the two days of theater-specific individual readiness training may be the most useful and challenging part of the CRC experience. On the next to last day of Company A's training, the students rotate through six stations (medical evacuation procedures, driving hazards/convoy operations, countermining operations, mine awareness, and force protection skills). On the final day, they rotate through two lanes (force protection and situational awareness) to practice skills learned the

previous day. Although participants undertake and demonstrate tasks they may never do again, the goal is to raise awareness of possible situations and train the proper responses.

The CRC takes its guidance from the theater commanders, and there is no room for exceptions. The deploying individual must document records, make sure they are up to date, and keep copies of everything. And his S-3 or training NCO should be available in case there are questions. If the CRC has any doubt about a person's satisfactory completion of required training, he will go through the scheduled training. This includes medical screening, weapons qualification, driver training, and other standard tasks. Verifying previous training is the individual's responsibility, not the CRC's. If not certified before reporting to CRC, he must be certified before being allowed to move on.

Finally, some *Do's* and *Don'ts* for reporting to CRC. Do arrive by 1900 on the day you are to report. Don't bring a government-provided or personal rental car; they are unauthorized, and you will sign a statement that you are in compliance. Do bring original or certified copies of any documents needed for correcting or reinstating your pay records. Don't bring any personal weapons or ammunition. Do bring your issue eyeglasses and protective mask inserts, along with two sets of ID tags. Do bring your medical and dental records. Don't forget the telephone and fax number for your S-3 or training NCO.

Today's operations require people from the entire Department of Defense and the civilian community. In eight short days, the CRC accomplishes the critical mission of certifying the deployability of these people, providing a baseline of training, and easing the burden of the gaining commanders. (*Submitted by Major Marc B. Carolan, U.S. Army, Europe.*)

TWO NEW INFANTRY SCHOOL field manuals are now available online in the Army Doctrine and Training Digital Library at <http://www.adtdl.army.mil/adtdl.html>.

FM 23-90, *Mortars*. This publication prescribes guidance for the leaders and crewmen of mortar squads and platoons. It is concerned with the problems of mortar crew training and presents practical solutions for the timely delivery of accurate mortar fires. It discusses the 60mm mortar (M224), the 81mm mortar (M252), the 4.2-inch mortar (M30), and the 120mm mortar (M120), including nomenclature, sighting, equipment, characteristics, capabilities, ammunition, and maintenance.

FM 23-91, *Mortar Gunnery*. This manual is divided into four parts: Introduction and Fundamentals of Mortar Gunnery, Fire Direction Center, Mortar Ballistic Computer, and M16 and M19 Plotting Boards. It provides guidance for soldiers in MOS 11C and their trainers on the employment of the 60mm, 81mm, 4.2-inch, and 120mm mortars. It discusses practical applications of ballistics and a system that combines the principles, techniques, and procedures that are essential to the delivery of timely and accurate mortar fire.

A NEW VERSION of Training Circular (TC) 23-AIMSS, *Advanced Infantry Marksmanship Strategies and Standards* will soon be available. The manual contains updated 25-meter zero procedures and target offsets for all weapon systems. It provides the latest information on all optics and laser aiming devices, including the PEQ-2A, as well as an updated night training strategy for all small arms and machineguns.

This version of the manual will be available online in the Army Doctrine and Training Digital Library at <http://www.adtdl.army.mil.html>.

THE U.S. ARMY SOUTHERN EUROPEAN Task Force (Airborne), known as SETAF, recently changed the designation of its infantry brigade. There will be no changes to SETAF's headquarters elements, the 22d Area Support Group, or other assigned activities.

The infantry brigade became the 173d Airborne Brigade following an

activation ceremony on 12 June 2000. The soldiers assigned to the brigade and its subordinate units will wear the shoulder patch of the 173d Airborne Brigade. All other soldiers assigned to SETAF will continue to wear the SETAF shoulder patch.

For more information on the 173d Airborne Brigade, visit the SETAF website at www.setaf.army.mil.

THE INFANTRY SCHOOL COURSE Feedback Survey is now available on the Fort Benning web site at <http://www-benning.army.mil>.

If you are an Infantry School graduate, please complete this survey six months after your graduation, and ask your commander or supervisor to complete it as well. All responses will be confidential.

The School's commanders, staff members, and instructors rely on your professional opinion of its effectiveness in producing graduates whose technical, tactical, and leadership skills and physical abilities meet the needs of the 21st century land warrior.

THE LAUNCH GRAPNEL HOOK (LGH) has been developed to help defeat landmine tripwires. Tripwires are commonly used with bounding mines (PROM-1), scatterable mines (BLU-42/B), stake mines (PMR-2A), and directed fragmentation (claymore style) antipersonnel mines, along with hundreds of others. The effective casualty radius of these mines is from 15 to more than 50 meters.

The LGH, was developed under the Soldier Enhancement Program, to meet requirements of light forces executing a deliberate or hasty breach. Approximately 20,000 LGH systems have been produced, with approximately 8,000 fielded to infantry and engineer companies.

The packaged LGH weighs three pounds; the LGH itself weighs only one pound. It has a range of 90 to 100 meters when fired at a 45-degree elevation angle using 5.56mm ball ammunition or the M195 grenade launching blank cartridge (DODAC 1330 G84), fired from

an M16 rifle or M4 carbine.

The recommended firing position is illustrated on the instruction card packaged with the LGH. The system is intended to be fired with the stock of the rifle held under the armpit or, from the prone position, with the butt of the weapon against the ground.

The LGH uses bullet-trap technology designed for one bullet. It can be fired once with 5.56mm ball ammunition. The expected range is between 90 and 100 meters. The M193 or the M855 cartridge may be used to fire the LGH. Firing a second ball round into the LGH creates a fragmentation effect and hence is not recommended.

The LGH is not intended to be fired using tracer ammunition. After being fired using ball ammunition, it can be fired indefinitely using blank ammunition for training. The M195, 5.56mm blank ammunition, launches the LGH approximately 90 to 100 meters. The M200, 5.56mm blank ammunition, launches it 20 to 25 meters and is suitable for training. Of the 3,300 launches during testing in 1995, there was no evidence of either degradation or damage to the system or the test weapon.

To achieve the greatest effectiveness for the LGH system, the firer must control the retrieval speed. Army tests have shown that pulling the hook back in a slow, controlled manner increases the system's ability to counter tripwires from 75 percent to 94 percent. The LGH was found to be approximately 90 percent effective in several environments, including tall grass, rocky soil, plowed earth, woodline vegetation, and grass less than a foot high.

Reusing the system's retrieval line for training is not recommended, but a training bag is available that has a line especially designed for multiple firings. At least one NATO country uses this bag as the combat system.

The NSNs are 1095-01-412-4150 for the LGH and 1095-01-413-9232 for the training bag with reusable line. The cost for either version is less than \$100. Delivery time is approximately one week in the continental United States and two weeks elsewhere. The DO-DAC for M195, 5.56 NATO blank ammunition is 1330 G84.

The point of contact at PM-MCD is Mr. Brian Green at DSN 654-1968, commercial (703) 704-1968, Fax (703) 704-1969, email bgreen@nvl.army.mil. *(Submitted by Major Mark Stephens, Assistant Project Manager for Countermine Systems.)*

TOP-OF-THE-LINE WEAPONS and items of equipment were tested recently at Fort Drum as a part of the Military Operations in Urban Terrain (MOUT) Advanced Concept Technology Demonstration (ACTD). U.S. Army soldiers and U.S. Marine Corps personnel participated in the tests.

The MOUT ACTD is set up to improve the survivability of soldiers in an urban environment. Once the soldiers have trained with it, it can be fielded and used at Joint Readiness Training Center (JRTC) at Fort Polk.

The soldiers and marines were asked to offer suggestions for improving on the equipment, and modifications were made to the equipment after every test run.

Several innovations were tested for soldier approval:

Explosive cutting tape (ECT). The ECT, which looks like a honey bun when placed on a wall, is a flexible, rope-like explosive used to blast a man-size hole through a brick wall. It is used in 12-to-20-foot sections that are mounted by tape or another adhesive on its flat bottom surface. A styrofoam-like material surrounds the copper core that contains the explosive. A simple fuse and detonator are used to ignite the device, which produces an explosion focused in the direction of its bottom surface. The focused explosion eliminates possible debris from the blast that could harm friendly troops.

The breacher's explosive access selectable tool (BEAST). This tool, which resembles a sleeping bag or a blanket at first glance, is used to blast a man-size hole into a section of brick wall, ceiling, or roof. The two-by-five-foot device has a diamond-shaped explosive embedded in its fabric. Tape or another adhesive is used to place it on its target, and a standard fuse and detonator are used to ignite it.

Rifle-launched entry munition.

This device, which looks like a fencing sword, is attached to and fired from the barrel of an M16 rifle or M4 carbine. It is designed to eliminate the doors or windows of a building from a distance of 10 to 30 meters.

New collapsible ladders. The more lightweight, compact ladders enable soldiers to get as high as the third floor of a building.

The new quick stepladder, made of a lightweight aluminum alloy, can be employed in a matter of seconds. The two-by-three-foot package attached to a rucksack can extend up to 14 feet.

The sectional light modular ladder extends up to 15 feet, and with a second segment attached extends to 30 feet, allowing insertion into a third-story window or entry through the roof of a two-story building. This ladder can be carried in a man-pack.

Hooligan Tool. Once in close quarters and tight spaces inside a building, soldiers use this mechanical device to defeat doors, locks, and windows. It is wedged into the door or window frame and pounded with a hammer to gain forced entry. The squad-level tool is carried on a squad member's rucksack where it is easily accessible.

Stun Grenade. Once the door or window is open, this small, handheld device is used to set off a loud bang and then a bright flash to disorient enemies.

Other advanced technology items include a newer, lighter body armor to improve soldiers' protection against rifle fire, new elbow and knee pads to stave off pain when soldiers crawl on cement or other tough surfaces, and the new Tuff Cuffs, which can be applied to prevent further resistance once an enemy has been subdued.

This equipment should be issued to all infantry units in the 10th Mountain Division in time for the battalion- and brigade-level exercises scheduled to take place in preparation for the Advanced Warfighting Experiment this fall. After the equipment is tested during the AWE, feedback from soldiers will determine whether it will be accepted for issue on a wider basis. *(This item was provided by the Public Affairs Office, 10th Mountain Division.)*